SEQUENCE LISTING

```
<110> Ranum, Laura P.W.
    Koob, Michael

<120> SPINOCEREBELLAR ATAXIA TYPE 8 AND METHODS OF DETECTION

<130> 11000900101

<140> NOT ASSIGNED
  <141> 1998-10-28
<160> 18
```

210> 1 <211> 1159 <212> DNA <213> Homo sapiens

<170> PatentIn Ver. 2.0

<400> 1 gaattcatgc ctataattta taagatctgc caccctacca gccttactgt ttttctcatt 60 ggtaatattc atgaagtcac tggtaatttt acattttaaa atatgcagta tgaattgcat 120 atataqtact tcttaaatqt caacacattt atcttaaatc atttatcqaa qtatqaqaaq 180 tacctatcat attttggtaa ataatacctt taggtttttc ctagttcttg gctccagact 240 aaccatcttg acctgtcatt ctagttttta cttctgagac attctatagt ctgtgtctga 300 tattetetae tattteetea titigteetig catteagatt geetittetg acteecaget 360 tccacggaga gattaactct gttggctgaa gccctatccc aattccttgg ctagaccctg 420 ggtccttcat gttagaaaac ctggcttdac tactactact actactacta ctactactac 480 tactqctact qctqctqctq ctqctqctqc tqctqctqct qctqctqctq ctqctqctqc 540 tgctgctgct gctgctgctg ctgctgctgc tgctgctgct gctgctgctg ctgctgctgc 600 tgctgctgct gctgctgctg ctgctgctgc tgctgctgct gctgctgctg ctgctgctgc 660 tgctgctgct gctgctgctg ctgctgctgc tgctgctgct gctgctgctg ctgctgctgc 720 tgctgcattt tttaaaaata tattatctta ttttactatt tgatgttata attgttatat 780 attittccat acticctcat actgcttatc tcttacttaa gaatttatga ataaagaatt 840 gatttttcaa tacatccttc caaaaattat ctqatqttqa gttagttgct ctctcttqtq 900 catteteagt ceteacaage ettteteaaa cacaatgttt atcaaagaaa attgtageaa 960 ccaatatact tagtggaatt tctcacagag tttgagtgta ggaaacagta ttcactgtat 1020 attagtcatt ttgctcccaa tagaaggtgc ataacataaa ttatttaagt ggatgaatgc 1080 tttattttcc tttataaaaq taccttcttq cttcactqac atttctatac aactattctt 1140 gtaagcaagg aatgaattc 1159

<210> 2 <211> 1471 <212> DNA <213> Artificial Sequence

+39 AD

<220> <223> Description of Artificial Sequence: cDNA comprising exons D, C, B, and A <400> 2 atcetteace tgttgeetgg etagagttgt etggeteeac tttgagetet tgeagaacea 60 gccctttttc gtgtggtcca ggaaagtcca tgcctggcac cacctcctcc tctagtgact 120 ccacgtagaa gagagtcctg gctggctgct gagtgccctg cccaggagcc ccttgctgca 180 gcctcgtggc aactggaagc agggtgccat tcagcggatt gaaggaagag gaggaagagg 240 acggggagga cgatgaagag gaagaggagg aaggcttctt ccagaaagtg ctcacaccgc 300 ttctctcttg gcttttgagc aggcgactct ggctgggtcc ccagtgctca aagctgccac 360 tgccqtcctg ttgcaggcag cctccccccg ccgggccgcc ggtggaagga gacqqqtqgc 420 tgaagagttt ccagcggagt cgcagaatgt gcttcacatc gaagtctttt cgcccagagc 480 ctgacatgct ttacgcacag aaggcaaaag gctggcagct cacgcagggt tctggaggct 540 gggaagttca agaccaatgc acgagaattt ggtctaaaga gaatcttctt gctctgaaca 600 cacatagtag aaggcagaag ggcaagagag agaacaaagt ctgtgtctcc acatggcaga 660 agagcagagg agacagaacc tactcctcta tggcaaccac cccatcaatg acaaaaatcc 720 tagaaggatg tatgtatagg aagttgaagt gttgagaaga gaatggctca gagtcaagcg 780 ggaacaagat tcaaacttca gagagagagg gaagaaaaac atttaaatat atctggcata 840 atccagacta tttacgacaa gtgttctgtg tttctaataa taaaacagac ttcacctcgg 900 agtacctgca gaactgggac cccaatgacc agggagaatg aagaacaact tgtttgaaga 960 ttgccttttc tgactcccag cttccacgga gagattaact ctgttggctg aagccctatc 1020 ccaatteett ggetagaeee tgggteette atgttagaaa acctggettt actaetaeta 1080 ctactactac tactactact actactgcta ctgctgctgc tgctgctgct gctgctgctg 1140 etgetgetge tgetgetget getgetgetg etgetgetge tgetgetget getgetgetg 1200 etgetgetge tgetgetget getgetgetg etgetgetge tgetgetget getgetgetg 1260 ctgctgctgc tgctgctgct gctgctgctg ctgctgctgc tgctgctgct gctgctgctg 1320 ctgctgctgc tgctgctgct gctgctgcat tttttaaaaa tatattatct tattttacta 1380 tttgatgtta taattgttat atatttttcc atacttcctc atactgctta tctcttactt 1440 aagaatttat gaataaagaa ttgatttttc a 1471 <210> 3 <211> 1037 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: cDNA comprising exons E, C, and A <400> 3 aagegtacce etegecagat etettggtge acetgegeee etgteeetgg cettttegag 60 gatgccccga tagcctgccg ggtggctctg agaaagtcaa ttgctttctg caatgccaga 120 agaggtggtt ttatatagtc agtttgtaaa agagaaaaat agatattcta gcgcatatag 180 ggaggcaaaa gaaaaagccc gcctgtgaag ctgtcaaggt cctcacagta caattttctc 240

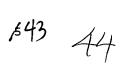
tctgcctcag cgcctcctcc tcccctttct ggaggctggg aagttcaaga ccaatgcacg 300 agaatttggt ctaaagagaa tcttcttgct ctgaacacac atagtagaag gcagaagggc 360 aagagagaga acaaagtctg tgtctccaca tggcagaaga gcagaggaga cagaacctac 420

| tcctctatgg caacca | cccc atcaatgaca | aaaatcctag | aaggatgtat | gtataggaag | 480 |
|--|-------------------|---------------|------------|------------|------|
| ttgaagtgtt gagaag | agaa tggctcagag | tcaagcggga | acaagattgc | cttttctgac | 540 |
| tcccagcttc cacgga | gaga ttaactctgt | tggctgaagc | cctatcccaa | ttccttggct | 600 |
| agaccctggg tccttc | | | | | |
| actactacta ctgcta | | | | | |
| gctgctgctg ctgctg | | | | | |
| gctgctgctg ctgctg | | | | | |
| gctgctgctg ctgctg | ctgc tgctgctgct | gctgctgctg | ctgctgctgc | tgctgctgct | 900 |
| gctgctgctg ctgcat | | | - | - | |
| tgttatatat ttttcc | atac ttcctcatac | tgcttatctc | ttacttaaga | atttatgaat | 1020 |
| aaagaattga tttttc | a | | | | 1037 |
| | | | | | |
| <210> 4 | | | | | |
| <211> 27 | | | | | |
| <212> DNA | | | | • | |
| <213> Artificial | Sequence | | | | |
| | | | | | |
| <220> | | | | | |
| <223> Description | of Artificial | Sequence: Pr | rimer | | |
| | | | | | |
| <400> 4 | | | | | |
| tcaattcttt attcat | aaat tcttaag | | | | 27 |
| | | | | | |
| <210> 5 | | | | | |
| <211> 30 | | | | | |
| <212> DNA | | | | | |
| <213> Artificial | Sequence | | | | |
| | | | | | |
| <220> | | | | | |
| <223> Description | of Artificial | Sequence: Pr | rimer | | |
| _ | | _ | • | | |
| <400> 5 | | | | | |
| tttgagaaag gcttgt | gagg actgagaatg | | | | 30 |
| | | | | | |
| <210> 6 | | | | | |
| <211> 23 | | | | | |
| <212> DNA | | | | | |
| <213> Artificial | Sequence | | | | |
| | 1 | | | | |
| <220> | | | | | |
| <223> Description | of Artificial (| Semience: Pr | imer | | |
| The state of the s | . 01 111 01110101 | ocquesico. 11 | | | |
| <400> 6 | | | | | |
| cctcatgtta gaaaac | tage ttt | | | | 23 |
| coccacycta yaaaac | cyge cee | | | | 23 |
| <210> 7 | | | | | |
| <211> 23 | | | | | |
| <211> 23 <212> DNA | | | | | |
| CLIAN DINA | | | | | |

×41 42

| <213> Artificial Sequence | |
|---|-----|
| <220> | |
| <223> Description of Artificial Sequence: Primer | |
| | |
| <400> 7 | 22 |
| acccagccag agtcgcctgc tca | 23 |
| <210> 8 | |
| <211> 29 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <pre><223> Description of Artificial Sequence: Primer</pre> | |
| | |
| <400> 8 | |
| gtaagagata agcagtatga ggaagtatg | 29 |
| <210> 9 | |
| <211> 26 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| | |
| <220> | |
| <223> Description of Artificial Sequence: Primer | |
| <400> 9 | |
| ggtccttcat gttagaaaac ctggct | 26 |
| | |
| <210> 10 | |
| <211> 682 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Description of Artificial Sequence: cDNA from BKRP | |
| transcript | |
| <400> 10 | |
| agtggacaca gatggcttcc ttgaatattg ggagagcagg tgcctgtgtg gtagtcatca | 60 |
| agcaacettg acttattgat attttacttg gaaagatttt acttgetgga gtggttattt | |
| ttatattgaa tggcaagaat gagaacttcc agagatgaaa actcttcaag aacaaggatc | |
| tetgtagegt tacetactga tgttgaaaga gttagtagat caaacagaat agtaggaaac | |
| aagaaaacat taaacttata caggaaaaat gtctggccat atgttagtta gttcgggaat | |
| ggttattggt aatttgtttt gtattatagc atacaataac tagagttacc aaaggcttgt | |
| tttttcttga gcagttgaaa ggagagacca atatttgtga catggatagt ttcatgacca | 420 |
| caactcattc aatcatttta tagtctatgg caatatccaa gagattgcca agagtagaag | 480 |

| acagaatatt tcatctgaca gtatctgatt ggtttactgt ttttctaatc atatgtggtcataacgggaa gcagaattat gctttattca aacaaacctg cttctgcctc attttcctaagctatgagaa caattagaga aacagattca tgcttgtatc ttgcattcag aaaacaaactgtcctactaa tcaaagctgc at | a 600 |
|---|-------|
| <210> 11 <211> 24 <212> DNA <213> Artificial Sequence | |
| <220> <223> Description of Artificial Sequence: Primer | |
| <400> 11 cttcatcgtc ctccccgtcc tctt | 24 |
| <210> 12 <211> 25 <212> DNA <213> Artificial Sequence | |
| <220> <223> Description of Artificial Sequence: Primer | |
| <400> 12 gccctatccc aattccttgg ctaga | 25 |
| <210> 13 <211> 29 <212> DNA <213> Artificial Sequence | |
| <220> <223> Description of Artificial Sequence: Primer | |
| <400> 13 gtctagccaa ggaattggga tagggcttc | 29 |
| <210> 14 <211> 25 <212> DNA <213> Artificial Sequence | |
| <220> <223> Description of Artificial Sequence: Primer | |
| <400> 14 gactccgctg gaaactcttc agcca | 25 |



| <210> 15 | |
|--|----|
| <211> 27 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| | |
| <220> | |
| <223> Description of Artificial Sequence: Primer | |
| | |
| <400> 15 | |
| tccatctttc tgaaggtttg ctcagca | 27 |
| | |
| <210> 16 | |
| <211> 22 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| | |
| <220> | |
| <223> Description of Artificial Sequence: Primer | |
| | |
| <400> 16 | |
| ttgaatggcc ggttgatgac ag | 22 |
| | |
| <210> 17 | |
| <211> 23 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| | |
| <220> | |
| <223> Description of Artificial Sequence: Primer | |
| · | |
| <400> 17 | |
| ctgctgagtg ccctgcccag gag | 23 |
| | |
| <210> 18 | |
| <211> 25 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| 4. | |
| <220> | |
| <223> Description of Artificial Sequence: Primer | |
| | |
| <400> 18 | |
| gtagtagtag tagtaaagcc aggtt | 25 |
| | |